

Fig. 1 Junghans

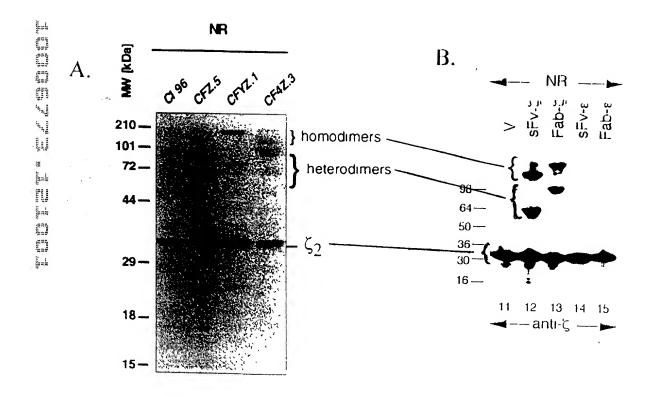


Fig. 2 Sunghous

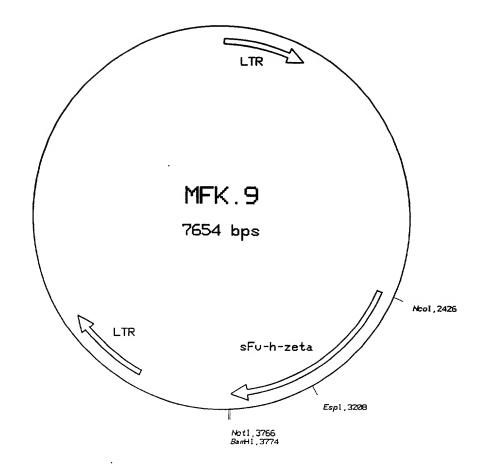


Fig. 3 Linghans

NAME: BMB3.6-H-Ch 504 BPS DNA UPDATED 6/25/93

DESCRIPTION: Heavy chain leader and variable region of BMB3.6-h

* * * * SEQUENCE * * *

1	TCACCATGAA AGTGGTACTT			TCCTTGTCCT AGGAACAGGA		
61	GTGAAGTGGT	GGTGGTGGAG	TCTGGGGGAG		GCCTGGAGGG	TCCCTGAAAC
121				GTAGATATGC CATCTATACG		
181				CCATAAGTAG GGTATTCATC		
241	ATCCAGACAG TAGGTCTGTC			TCTCCAGAGA AGAGGTCTCT		
301				ACACGGCCAT TGTGCCGGTA		
361				TCTGGGGCGC AGACCCCGCG		
421				AGGGACTAAA TCCCTGATTT		
481		ATGTCACTAA TACAGTGATT	0011			

Fig. 4A Juralises NAME: BMB3.6-L-Ch 483 BPS DNA UPDATED 6/25/93

DESCRIPTION: 11GHT CHAIN LEADER AND VARIABLE REGION OF bmb3.6 C

ja ja

* * * * S E Q U E N C E * * *

	1.			GACTTATGCT CTGAATACGA	
	61			CCACCCTGTC GGTGGGACAG	
1	21			TTAGCAACAA AATCGTTGTT	
1				AGTATGCTTC TCATACGAAG	
	41			CAGATTTCAC GTCTAAAGTG	
Pari	01			AACAGAGTAA TTGTCTCATT	
3 3	61			GTAAGTGTGT CATTCACACA	
4. 4 1. 4	21			GGTAATGTCA CCATTACAGT	CTTGTCAGGA GAACAGTCCT
4	81	TCC AGG			

Fig. 4B Longhans

NAME:

ant.

sFv MB3.6

DESCRIPTION: Light chain leader plus sFv of MB3.6

* * * SEQUENCE * * *

+vector Xb2I Start -- leader 1 GATATCAGAT CTCAGCTGTC TAGACATATG GTTTTCACAC CTCAGATANN NNNNNNNNN OPF D I R S Q L S R H M V F T P Q I I S D L S C L D I W F S H L R ? YQISAV-TYGFHTSD???? leader + T+VL ? ? ? ? ? ? ? ? ? ? ? ? ? G T K L E ? ? ? ? ? ? ? ? ? G Q S W ? ? ? ? ? ? ? P K A G Linker 4TT VH VL4-+Linker ATCAAAGGTG GCTCAGGATC GGGTGGAGCC GGCTCTGGTG GCTCAGGATC GGAAGTGGTG IKG GSG SGG A GSG GSG SEVV RSKV AQD RVE PALV AQD RKW DQR WLRIGWS RLW VH + →TCR E/h3 ACGGTCACCG TCTCCAGT T V T V S S P R S P S P 14 HGH RLQ 運 Hand to the same of the same o

> Fig. 4C Llinghans

FILE NAME : 3D8HCDNA.SEQ

SEQUENCE: 682BP; 153 A; 184 C; 173 G; 172 T.

*** SEQUENCE LIST ***

(DOUBLE)

	10	20	30	40	50	60
5 ′	TGAACACGGA	CCCCTCACCA	TGAACTTCGG	GCTCAGCTTG	ATTTTCCTTG	TCCTTGTTTT
3′	ACTTGTGCCT	GGGGAGTGGT	ACTTGAAGCC	CGAGTCGAAC	TAAAAGGAAC	AGGAACAAAA
	70	80	90	100	110	120
	AAAAGGTGTC	CAGTGTGAAG	TGAAGGTGGT	GGAGTCTGGG	GGAGGCTTAG	TGAAGCCTGG
	TTTTCCACAG	GTCACACTTC	ACTTCCACCA	CCTCAGACCC	CCTCCGAATC	ACTTCGGACC
	130	140	150	160	170	180
P=L		AAACTCTCCT				
4-1	TCGCAGAGAC		CACGTCGGAG	ACCTAAGTGA	AAGTCATTGA	TACCGTACAG
444	190	200	210	220	230	240
174	TTGGGTTCGC	CAGACTTCAG	ACAAGAGGCT	GGAGTGGGTC	GCATCCATTA	GTAGTGGTGG
471	AACCCAAGCG	GTCTGAAGTC		CCTCACCCAG	CGTAGGTAAT	CATCACCACC
44	250	260	270	280	290	300
, a, a, iii	TGATAGCACC	TTCTATGCAG	ACAATGTAAA	GGGCCGATTC	ACCATCTCCA	GAGAGAATGC
		AAGATACGTC				CTCTCTTACG
12	310	320	330	340	350	360
	CAAGAACACC	CTGTACCTGC	AAATGAGTAG	TCTGAAGTCT	GAGGACACGG	CCTTGTATTA
in Share	GTTCTTGTGG	GACATGGACG				
i bi	370	380	390	400	410	420
	CIGIGCAAGA	GACGATCTAT	TTAACTGGGG	CCAAGGCACC	ACTCTCACAG	TCTCATCAGC
	GACACGTTCT	CTGCTAGATA				
	430	440	450	460	470	480
le e b	CAAAACAACA	GCCCCATCGG	TCTATCCACT	GGCCCCTGTG	TGTGGAGATA	CAATTGGCTC
		CGGGGTAGCC				
	490	500	510	520	530	540
	CTCGGTGACT	TTAGGATGCC	TGGTCAAGGG	TTATTTCCTT	GAGCCAGTGA	CCTTGACCTG
		AATCCTACGG				
	550	560	570	580	590	600
	COMMCACACOM	TCCCTGTCCA	GTGGTGTGCA	CATCTTCCCA	GCTGTCTTGC	AGTCTGACCT
	CITGAGACCT	AGGGACAGGT				
	610	620	630	640	650	660
	CAMCMCCCAC	AGCAGCTCAG	TGACTGTAAC	CTCGAGCACC	TGGCCCAGCC	AGTCCATCAC
	670	TCGTCGAGTC	ACTGACATTG	GAGCTCGTGG	ACCGGGTCGG	TCAGGTAGTG
		086	<i>a</i> , ,,			
		GCCCACCCGG				
	AACGITACAC	CGGGTGGGCC	GT 5'			

FILE NAME: 3D8LCDNA.SEQ

SEQUENCE: 729BP; 203 A; 177 C; 172 G; 177 T.

*** SEQUENCE LIST *** (DOUBLE)

	10	20	30	40	50	60
5′	CCGTTGCCGT	CGTGATGAGT	CCTGCCCAGT	TCCTGTTTCT	GTTAGTGCTC	TGGATTCAGG
3 <i>'</i>	GGCAACGGCA	GCACTACTCA	GGACGGGTCA	AGGACAAAGA	CAATCACGAG	ACCTAAGTCC
	70	80	90	100	110	120
	AAACCAACGG	TGATGTTGTA	ATGACCCAGA	CTCCACTCAC	TTTGTCGGTT	ACCATTGGAC
	TTTGGTTGCC	ACTACAACAT	TACTGGGTCT	GAGGTGAGTG	AAACAGCCAA	TGGTAACCTG
	130	140	150	160	170	180
	AACCAGCCTC	TATCTCTTGC	AAGTCAAGTC	AGAGCCTCTT	ATATAGTAAT	GGAAAAACCT
	TTGGTCGGAG	ATAGAGAACG	TTCAGTTCAG	TCTCGGAGAA	TATATCATTA	CCTTTTTGGA
	190	200	210	220	230	240
ji si	ATTTGAATTG	GTTATTACAG	AGGCCAGGCC	AGTCTCCAAA	GCGCCTAATC	TATCTGGTGT
	TAAACTTAAC	CAATAATGTC	TCCGGTCCGG	TCAGAGGTTT	CGCGGATTAG	ATAGACCACA
	250	260	270	280	290	300
	CTAAACTGGA	CTCTGGAGTC	CCTGACAGGT	TCACTGGCAG	TGGATCAGGA	ACAGATTTTA
Æ.	GATTTGACCT	GAGACCTCAG	GGACTGTCCA	AGTGACCGTC	ACCTAGTCCT	TGTCTAAAAT
,,,,	310	320	330	340	350	360
4.1	CACTGAAAAT	CAGCAGAGTG	GAGGCTGAGG	ATTTGGGAGT	TTATTACTGC	GTGCAAGGTA
- 8 = 1	GTGACTTTTA	GTCGTCTCAC	CTCCGACTCC	TAAACCCTCA	AATAATGACG	CACGTTCCAT
ring and	370	380	390	400	410	420
	CACATTTTCC	TCACACGTTC	GGAGGGGGA	CCAAGCTGGA	AATAAAACGG	GCTGATGCTG
	GTGTAAAAGG	AGTGTGCAAG	CCTCCCCCT	GGTTCGACCT	TTATTTTGCC	CGACTACGAC
FLJ	430	440	450	460	470	480
- ibak	CACCAACTGT	ATCCATCTTC	CCACCATCCA	GTGAGCAGTT	AACATCTGGA	GGTGCCTCAG
441	GTGGTTGACA	TAGGTAGAAG	GGTGGTAGGT	CACTCGTCAA	TTGTAGACCT	CCACGGAGTC
durant de la constant	490	500	510	520	530	540
in-ia	TCGTGTGCTT	CTTGAACAAC	TTCTACCCCA	AAGACATCAA	TGTCAAGTGG	AAGATTGATG
	AGCACACGAA	GAACTTGTTG	AAGATGGGGT	TTCTGTAGTT	ACAGTTCACC	TTCTAACTAC
	550	560	570	580	590	600
	GCAGTGAACG	ACAAAATGGC	GTCCTGAACA	GTTGGACTGA	TCAGGACAGC	AAAGACAGCA
	CGTCACTTGC	TGTTTTACCG	CAGGACTTGT	CAACCTGACT	AGTCCTGTCG	TTTCTGTCGT
	610	620	630	640	650	660
	CCTACAGCAT	GAGCAGCACC	CTCACGTTGA	CCAAGGACGA	GTATGAACGA	CATAACAGCT
	GGATGTCGTA	CTCGTCGTGG	GAGTGCAACT	GGTTCCTGCT	CATACTTGCT	GTATTGTCGA
	670	680	690	700	710	720
	ATACCTGTGA	GGCCACTCAC	AAGACATCAA	CTTCACCCAT	TGTCAAGAGC	TTCAACAGGA
	TATGGACACT	CCGGTGAGTG	TTCTGTAGTT	GAAGTGGGTA	ACAGTTCTCG	AAGTTGTCCT

ATGAGTGTT 3'

TACTCACAA 5'

FILE NAME: 4D4HCDNA.SEQ

SEQUENCE: 736BP; 170 A; 210 C; 186 G; 170 T.

*** SEQUENCE LIST *** (DOUBLE)

20 30 40 5' ACTGACTCTA ACCATGGGAT GGAGATGGAT CTTTCTTTTC CTCCTGTCAG GAACTGCAGG 3' TGACTGAGAT TGGTACCCTA CCTCTACCTA GAAAGAAAAG GAGGACAGTC CTTGACGTCC 80 90 100 TGTCCATTGC CAGGTTCAGC TGCAGCAGTC TGGACCTGAG CTGGTGAAGC CTGGGGCTTT ACAGGTAACG GTCCAAGTCG ACGTCGTCAG ACCTGGACTC GACCACTTCG GACCCCGAAA 140 150 160 AGTGAAGATA TCCTGCAAGG CTTCTGGTTA CACCTTCACA AGCTACGATA TAAACTGGGT TCACTTCTAT AGGACGTTCC GAAGACCAAT GTGGAAGTGT TCGATGCTAT ATTTGACCCA 200 210 220 GAAGCAGAGG CCTGGACAGG GACTTGAGTG GATTGGATGG ATTTATCCTG GAGATGGTGG CTTCGTCTCC GGACCTGTCC CTGAACTCAC CTAACCTACC TAAATAGGAC CTCTACCACC 260 270 280 TACTAATTAC AATGAGAAAT TCAAGGGCAA GGCCACACTG ACTGCAGACA AATCCTCCAG ATGATTAATG TTACTCTTTA AGTTCCCGTT CCGGTGTGAC TGACGTCTGT TTAGGAGGTC 320 330 340 * CACAGCCTAC ATGCAGCTCA GTAGCCTGAC TTCTGAGAAC TCTGCAGTCT ATTTCTGTGC FIGTCGGATG TACGTCGAGT CATCGGACTG AAGACTCTTG AGACGTCAGA TAAAGACACG 380 390 400 👫 AAGAGGGGGT AACTTCCCTT CTTATGCTAT GGACTACTGG GGTCAAGGAA CCTCAGTCAC TTCTCCCCCA TTGAAGGGAA GAATACGATA CCTGATGACC CCAGTTCCTT GGAGTCAGTG 430 440 450 460 470 CGTCTCCTCA GCCAAAACGA CACCCCCATC TGTCTATCCA CTGGCCCCTG GATCTGCTGC GCAGAGGAGT CGGTTTTGCT GTGGGGGTAG ACAGATAGGT GACCGGGGAC CTAGACGACG 490 500 510 520 CCAAACTAAC TCCATGGTGA CCCCGGGATG CCTGGTCAAG GGCTATTTCC CTGAGCCAGT GGTTTGATTG AGGTACCACT GGGGCCCTAC GGACCAGTTC CCGATAAAGG GACTCGGTCA 560 570 580 GACAGTGACC TGGAACTCTG GATCCCTGTC CAGCGGTGTG CACACCTTCC CAGCTGTCCT CTGTCACTGG ACCTTGAGAC CTAGGGACAG GTCGCCACAC GTGTGGAAGG GTCGACAGGA 620 630 640 GCAGTCTGAC CTCTACACTC TGAGCAGCTC AGTGACTGTC CCCTCCAGCA CCTGGCCCAG CGTCAGACTG GAGATGTGAG ACTCGTCGAG TCACTGACAG GGGAGGTCGT GGACCGGGTC 680 690 700 CGAGACCGTC ACCTGCAACG TTGCCCACCC GGCCAGCAGC ACCAAGGTGG ACAAGAAAAT GCTCTGGCAG TGGACGTTGC AACGGGTGGG CCGGTCGTCG TGGTTCCACC TGTTCTTTTA TGTGCCCAGG GATTGT 3' ACACGGGTCC CTAACA 5'

FILE NAME: 4D4LCDNA.SEQ

SEQUENCE: 504BP; 120 A; 126 C; 122 G; 136 T.

(DOUBLE) *** SEQUENCE LIST ***

	10	20	30	40	50	60
5 <i>'</i>	CTCAAAATGA				TCTGGATTCC	
3 <i>'</i>	GAGTTTTACT	TCAACGGACA	ATCCGACAAC	CACGACTACA	AGACCTAAGG	ACGAAGGTTG
	70	80	90	100	110	120
	AGTGATGTTT	TGATGACCCA	ATCTCCACTC	TCCCTGCCTG	TCAGTCTTGG	AGATCAAGCC
	TCACTACAAA	ACTACTGGGT	TAGAGGTGAG	AGGGACGGAC	AGTCAGAACC	TCTAGTTCGG
	130	140	150	160	170	180
ļal	TCCATCTCTT				ATGGAGACAC	
75	AGGTAGAGAA	CGTCTAGATC	AGTCTCGTAA	CAGGTATCAT	TACCTCTGTG	GATAAATCTT
	190	200	210	220	230	240
and and	TGGTACCTGC				TCTACAAGGT	
	ACCATGGACG				AGATGTTCCA	AAGGCTGGCT
, P. II	250	260	270	280	290	300
. 4.1	TTTTCTGGGG				GGACAGATTT	
, il					CCTGTCTAAA	
iphi 	310	320	330	340	350	360
## #11	ATCAGCAGAG				GCTTTCAAGG	
Fra See s	TAGTCGTCTC	ACCTCCGACT			CGAAAGTTCC	
W,	370	380	390	400	410	420
- hali	CCGTACGCGT				GGGCTGATGC	
	GGCATGCGCA				CCCGACTACG	ACGTGGTTGA
	430	440	450	460	470	480
Hal	GTATCCATCT	TCCCACCATC			GAGGTGCCTC	
	CATAGGTAGA		GTCACTCGTC	AATTGTAGAC	CTCCACGGAG	TCAGCACACG
	490	500				
		ACTTCTACCC				
	AAGAACTTGT	TGAAGATGGG	GTTT 5'			•

FILE NAME : 3E11HCDN.SEQ

SEQUENCE: 761BP; 167 A; 213 C; 188 G; 193 T.

*** SEQUENCE LIST *** (DOUBLE)

	10					
	10	20	30	40	50	60
5'		ATTTCCAGTT				
3'		TAAAGGTCAA				
	70	80	90	100	110	120
		GGGCTCAGCT				
		CCCGAGTCGA				
ä ;	130	140	150	160	170	180
gai gai		GTGGAGTCTG				
		CACCTCAGAC				
	190	200	210	220	230	240
Pat Las		TCTGGATTCA				
		AGACCTAAGT				CGGTCTGAAG
And a	250	260	270	280	290	300
T-I		CTGGAGTGGG				
		GACCTCACCC			CCACGATTAT	GGAAGATAGG
# 14 ##	310	320	330	340	350	360
#-L		AAGGGCCGAT				
	TCTGTTACAT			GTCTCTCTTA	CGGTTCTTGT	GGGATATGGA
	370	380	390	400	410	420
ihat ihat		AGTCTGAAGT				
	CGTTTACTCA	TCAGACTTCA		CCGGAACATA	AAGACACGTT	CTCTATCAGT
	430	440	450	460	470	480
ak	CTCCGTAGGT				CTGGTCACTG	
		ACAACCAAAC	GATGGACCCC	GGTTCCCTGA	GACCAGTGAC	AGAGACGTCG
	490	500	510	520	530	540
	CAAAACAACA	CCCCCATCAG	TCTATCCACT	GGCCCCTGGG	TGTGGAGATA	CTACTGGTTC
	GTTTTGTTGT	GGGGGTAGTC	AGATAGGTGA	CCGGGGACCC	ACACCTCTAT	GATGACCAAG
	550	560	570	580	590	600
	CTCCGTGACT	CTGGGATGCC	TGGTCAAGGG	CTACTTCCCT	GAGTCAGTGA	CTGTGACTTG
	GAGGCACTGA	GACCCTACGG	ACCAGTTCCC	GATGAAGGGA	CTCAGTCACT	GACACTGAAC
	610	620	630	640	650	660
	GAACTCCGGA	TCCCTGCCCA	GCAGTGTGCA	CACCTTCCCA	GCTCTCCTGC	AGTCTGGACT
	CTTGAGGCCT	AGGGACGGGT			CGAGAGGACG	
	670	680	690	700	710	720
	CTACACTATG	AGCAGCTCAG	TGACTGTCCC	CTCCAGCACC	TGGCCAAGCC	
	GATGTGATAC				ACCGGTTCGG	
	730	740	750	760		
	CTGCAGTGTT	GCTCACCCAG	CCAGCAGCAC		A 3'	
		CGAGTGGGTC				
					-	

FILE NAME : 3E11LCDN.SEQ

SEQUENCE: 698BP; 199 A; 179 C; 167 G; 153 T.

*** SEQUENCE LIST ***

(DOUBLE)

	10	20	30	40	50	60
5′		CATCAAGATG				
3′	GGTCGTACCC	GTAGTTCTAC	CTTAGTGTCT	GAGACCAGAA	GTATAGGTAT	GACGAGACCA
	70	80	90	100	110	120
	TATATGGAGC	TGATGGGAAC	ATTGTAATGA	CCCAATCTCC	CAAATCCATG	TCCATGTCAG
	ATATACCTCG	ACTACCCTTG	TAACATTACT	GGGTTAGAGG	GTTTAGGTAC	AGGTACAGTC
la i	130	140	150	160	170	180
		GGTCACCTTG				
THE STATE OF THE S	ATCCTCTCTC	CCAGTGGAAC	TGGACGTTCC	GGTCACTCTT	ACACCAATGA	ATACAAAGGA
Fat.	190	200	210	220	230	240
		GAAACCAGAG				
M	CCATAGTTGT	CTTTGGTCTC	GTCAGAGGAT	TTGACGACTA	TATGCCCCGT	AGGTTGGCCA
in the state of th	250	260	270	280	290	300
'4 t.]]	ACACTGGGGT	CCCCGATCGC	TTCACAGGCA	GTGGATCTGC	AACAGATTTC	ACTCTGACCA
		GGGGCTAGCG		CACCTAGACG		TGAGACTGGT
i#	310	320	330	340	350	360
ļ-i	TCAGCAGTGT	GCAGGCTGAA	GACCTTGCAG	ATTATCACTG	TGGACAGGGT	TACAGCTATC
		CGTCCGACTT				ATGTCGATAG
ļ-L	370	380	390	400	410	420
101	CGTACACGTT	CGGAGGGGG	ACCAAGCTGG	AAATAAAACG	GGCTGATGCT	GCACCAACTG
		GCCTCCCCC			CCGACTACGA	
	430	440	450	460	470	480
Y	TATCCATCTT	CCCACCATCC	AGTGAGCAGT	TAACATCTGG	AGGTGCCTCA	GTCGTGTGCT
		GGGTGGTAGG		ATTGTAGACC	TCCACGGAGT	CAGCACACGA
	490	. 500	510	520	530	540
	TCTTGAACAA	CTTCTACCCC	AAAGACATCA	ATGTCAAGTG	GAAGATTGAT	GGCAGTGAAC
		GAAGATGGGG				CCGTCACTTG
	550	560	570	580	590	600
	GACAAAATGG	CGTCCTGAAC	AGTTGGACTG	ATCAGGACAG	CAAAGACAGC	ACCTACAGCA
		GCAGGACTTG				
	610	620	630	640	650	660
	TGAGCAGCAC	CCTCACGTTG	ACCAAGGACG	AGTATGAACG	ACATAACAGC	TATACCTGTG
		GGAGTGCAAC		TCATACTTGC	TGTATTGTCG	ATATGGACAC
	670	680	690			
		CAAGACATCA				
	TCCGGTGAGT	GTTCTGTAGT	TGAAGTGGGT	AGCAGTTC 5	•	

Fig. 4I Junghans

Andi-GD3 IgTCR-modified Trelli

Anti-Melanoma IgTCR Tumor Targeting

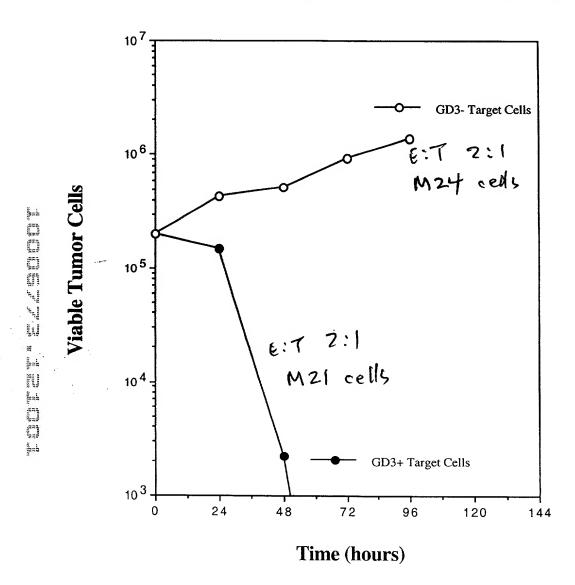


Fig. S Junghans

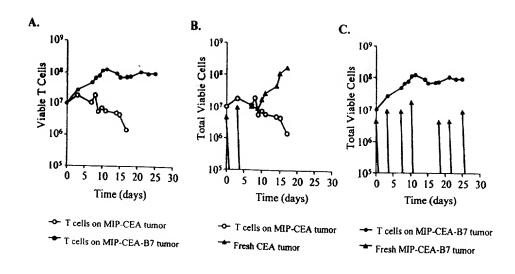
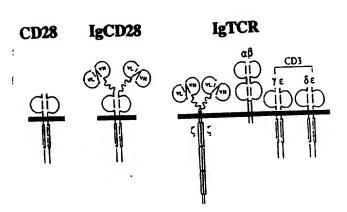


Fig. 6 Junghans



Fisi7 Junghans